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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,931	11/08/2000	Nathan B. Emery	5121	2998

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Millen & Company  
P O Box 1927  
Spartanburg, SC 29304

EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 09/30/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicant(s)

09/708,931

Applicant(s)  
EMERY ET AL.

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 8-15 and 34-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 16-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 6) ☐ Other:

## **DETAILED ACTION**

### ***Response to Amendment***

1. Preliminary Amendment A, filed March 2, 2001, as Paper No. 5, has been entered. The Specification has been updated as requested.

### ***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1 – 7 and 16 – 33, drawn to a napped woven fabric, classified in class 428, subclass 85.
  - II. Claims 8 – 15 and 34 - 36, drawn to a method of hydraulically treating a woven fabric, classified in class 28, subclass 104.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the napped fabric can be made by sanding or brushing the woven fabric, instead of hydraulically treating the woven fabric.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Sara Current on August 14, 2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1 – 7 and 16 – 33.

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Affirmation of this election must be made by applicant in replying to this Office action. Claims 8 – 15 and 34 – 36 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1 – 7 and 16 – 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. The term "fancy weave construction" in claim 1 is a relative term which renders the claim indefinite. The term "fancy weave construction" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear what qualifies as a "fancy" weave. Claim 16 is similarly rejected. Claims 2 – 7 and 17 – 33 are rejected due to their dependence on claims 1 or 16.

10. The term "broken filament yarns" in claim 6 is indefinite. It is unclear what the Applicant means by "broken filament yarns". Is the yarn made from chopped up pieces of

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filaments? How is the yarn broken, and is the yarn completely broken or are just the filaments in the yarn broken?

11. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 20 recites the broad recitation that the tensile strength of the napped fabric in the filling direction is at least about 50% of it's pre-napped strength, and the claim also recites that the tensile strength of the napped fabric in the filling direction is at least about 75% of it's pre-napped strength which is the narrower statement of the range/limitation.

***Claim Rejections - 35 USC § 102/103***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1 – 4, 6, and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Heiman (5,495,874).

Heiman discloses a woven fabric comprising cotton warp yarns and continuous filament filling yarns (abstract). Cotton yarns are inherently spun yarns, since the yarns are made from cotton staple fibers. The fabric would inherently have a hand for the face of the fabric which is approximately equal to the hand for the back of the fabric since the face and back of the fabric have the same structure.

Although Heiman does not explicitly teach the limitations MIU values and SMD surface roughness, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. woven fabric with spun warp yarns and filament filling yarns) and in the similar production steps (i.e. weaving the spun and filament yarns together) used to produce the woven fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed limitations would obviously have been provided by the process disclosed by Heiman. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Thus, claims 1 – 4 and 7 are rejected.

With respect to claim 6 which recites that the fabric is a dobby weave construction or a jacquard weave construction fail to add any specific structure to the construction of the woven

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fabric, since the limitations just refer to fabrics made on a dobby loom or a jacquard loom.

While a dobby loom and a jacquard loom have the ability to make more complex structures than plain woven or twill woven fabrics, the woven fabrics produced on these looms cover a broad range of structures, including plain weave fabrics. In other words, even though dobby and jacquard looms have the ability to produce intricately detailed fabrics, they can also produce simple fabrics which would include plain woven fabrics. Thus, the limitations are given no patentable weight at this time since the Applicant has not limited the fabric weave to a specific weave construction which would affect the structure of the product in a manipulative sense.

15. Claims 1 – 7 and 16 – 33 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Otto (4,512,065).

Otto discloses a process for mechanically surface-finishing a textile fabrics (abstract). Otto teaches that a wide variety of fabrics would benefit from the finishing process including woven fabrics of well-known constructions, which would include dobby or jacquard weave constructions, comprising spun yarns, filament yarns, or both types of yarns in the same fabric (column 6, lines 46 – 50). The surface-finishing process includes mechanical impact of the fabric's surface with abrasive means (column 3, lines 5 – 9). Or, in other words, the process involves napping the fabric's surface. Additionally, the abrasive mechanical process would inherently break some of the filament yarns.

Although Otto does not explicitly teach the limitations of MIU values, SMD surface roughness, surface hand, tensile strength of the warp and filling yarns, and shear stiffness, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. spun yarns and filament yarns) and in

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the similar production steps (i.e. weaving the yarns together to form a fabric and napping said fabric) used to produce the napped fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed limitations would obviously have been provided by the process disclosed by Otto. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Thus, claims 1 – 7, 16 – 28, 31, and 32 are rejected.

Additionally, claims 29 and 30 are rejected with claim 1, since the limitations that the fabric is napery or curtains fails to add further structure to the fabric of claim 1.

#### ***Claim Rejections - 35 USC § 103***

16. Claims 1 – 7 and 16 – 33 are rejected under 35 U.S.C. 103(a) as obvious over Willbanks (5,080,952) in view of Otto.

Willbanks discloses a method of raising, or napping, surface fibers on textile fabrics using high velocity fluid streams (column 1, lines 15 – 25). Napping a fabric improves various properties such as softness to touch, cover, and provides greater warmth (column 2, lines 9 – 14). Napping the fabric using high velocity fluid streams produces fabrics which exhibit greater strengths than may be achieved using conventional napping and shearing processes (column 3, lines 14 – 20). Additionally, the raised pile exhibits greater pile density and uniformity and greater fill yarn strength (column 3, lines 25 – 33). Further, Will banks teaches the treated fabric is a woven fabric which preferably comprise spun yarns in the warp direction (column 3, lines 40 – 43). However, Willbanks fails to teach using filament yarns in the woven fabric. The features of Otto have been set forth above. Otto discloses that woven fabrics comprising both spun yarns and filament yarns can be treated by napping processes to produce fabrics with raised surfaces.

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Thus, it would have been obvious for one having ordinary skill in the art to use a fabric with a mixture of filament yarns and spun yarns, as taught by Otto, with the spun yarns in the warp direction and treated with high speed jets, as taught by Willbanks since Willbanks teaches that using high speed jets produces a fabric with a raised surface which has improved strength in the fill yarn direction when compared to other napping processes as well as improved greater pile density and uniformity. Also, Willbanks teaches the warp yarns should preferably be spun yarns.

Although the limitations of MIU value, SMD surface roughness, hand, tensile strength of warp and filling yarns, and shear stiffness are not explicitly taught by Willbanks or Otto, it is reasonable to presume that said limitations would be met by the combination of the two references. Support for said presumption is found in the use of similar materials (i.e. spun yarns and filament yarns) and in the similar production steps (i.e. woven to form a fabric and then napping said fabric) used to produce the pile fabric. The burden is upon the Applicant to prove otherwise. Thus, claims 1 – 5, 7, 16 – 28, 31, and 32 are rejected.

Claim 6 and 33 are rejected with claim 1 and 16, since the limitations of dobby weave construction and jacquard weave construction are not given patentable weight at this time, for the reasons set forth above.

Additionally, claims 29 and 30 are rejected with claim 1, since the limitations that the fabric is napery or curtains fails to add further structure to the fabric of claim 1.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (9:00 - 5:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo  
September 19, 2002



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